

Capstone Industry Council Meeting

**Welcome – Sue Gardner
Opening Remarks**

April 12, 2006



**Federal Aviation
Administration**

Capstone



Agenda

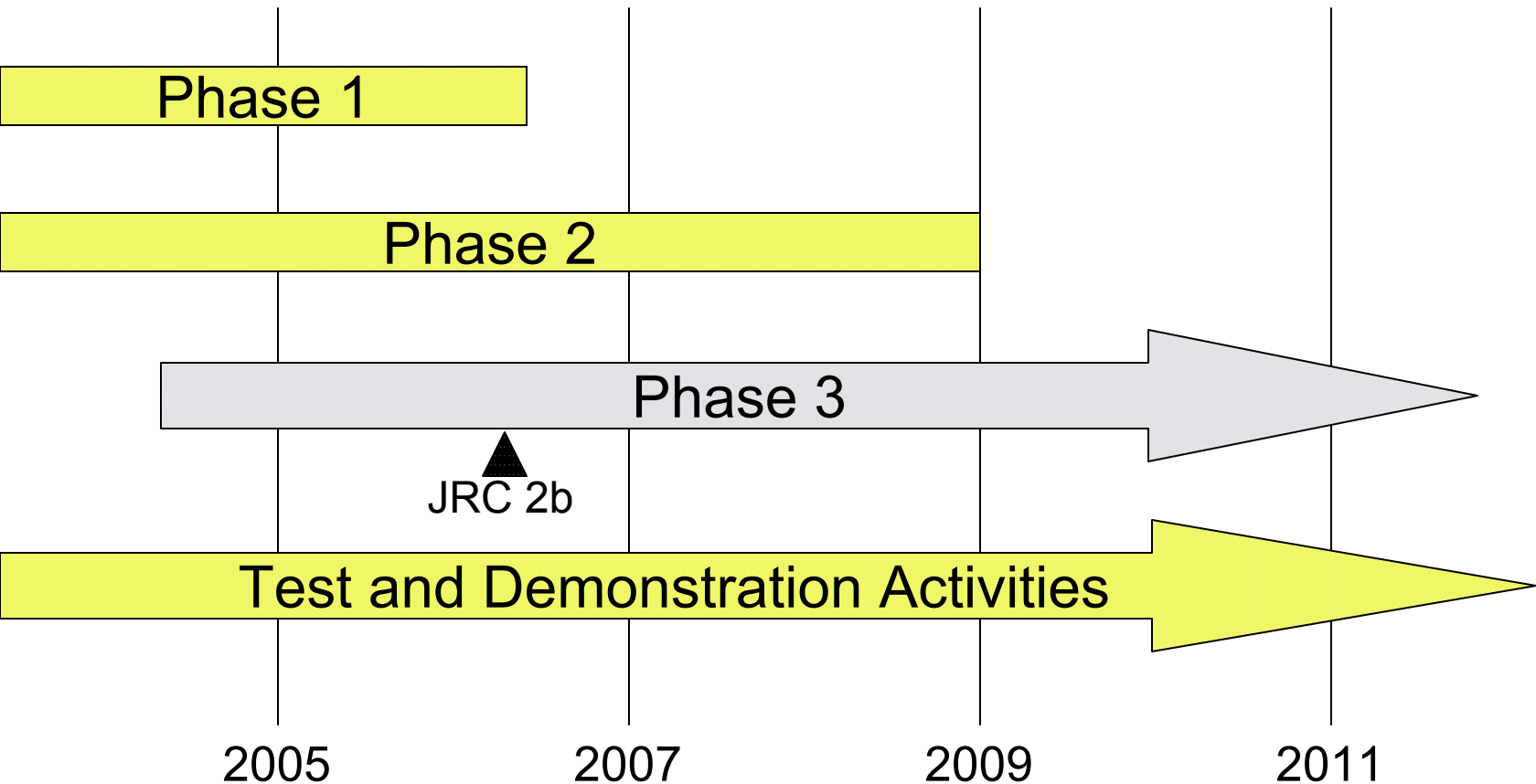
- 0800-0915 Information Sharing
 - Opening Sue Gardner
 - Garmin SW Upgrade Ray Collins
 - Helicopter Installations Ray Collins
 - Avionics Maintenance in SE Ray Collins
 - Capstone Coalition Update Tom George / Dee Hanson
 - Nav Database Update Sue Gardner
 - WAAS JoAnn Ford
 - Capstone Services Status Mark Olson
 - ADS-B Off the Glass Pat Poe / Sue Gardner
- **0915-0945 Open Discussion with Special Guest (Rick Day)**
- **0945-1000 Industry Feedback (Roundtable)**

Capstone Mission Statement

- ...an Alaska Safety and Capacity Program which seeks near term safety, access and efficiency gains by accelerating implementation and use of new NAS technologies
-links multiple programs and initiatives under a common umbrella for planning, coordination, focus and direction
-develops capabilities and requirements jointly with FAA, the Alaskan community and aviation industry in a manner consistent with future NAS plans and concepts, and implements in a manner leading to self-equipage

Background:

Capstone Program Activities



Garmin 5.7 Software Progress in Y-K Delta

Operator	Pilots Trained	Xpondr Acft Equipped/Installed
Hageland	all active pilots	100%
Grant	all active pilots	100%
All Other	54/54	52/52

Capstone SE Installations

April 11, 2006

Chelton:	90 completed	3 In progress	7 Remaining
Garmin F/W:	35 completed	6 In progress	1 Remaining
Garmin Hel:	7 completed	8 In progress	13 Remaining
GDL90 Ret:	60 completed		4 Remaining
GDL-IDU :	22 completed		25 Remaining

Maintenance in SE Alaska

- RFP for maintenance services after 6/30/06 in process
- Maintenance training scheduled to begin in late April

Navigation Data Base Update

- 2003-4: AACCA Exemption Petition; allow pilots of members update nav data bases
- May 2005: FAA denied petition – no rulemaking by exemption or by association
- December 2005: FAA draft proposed rule to allow this – now in coordination
- April 2006: AACCA, AEA, SAMA, FAA mtg: Request go forward with rule, or exempt Alaska or Capstone. FAA to respond soon.

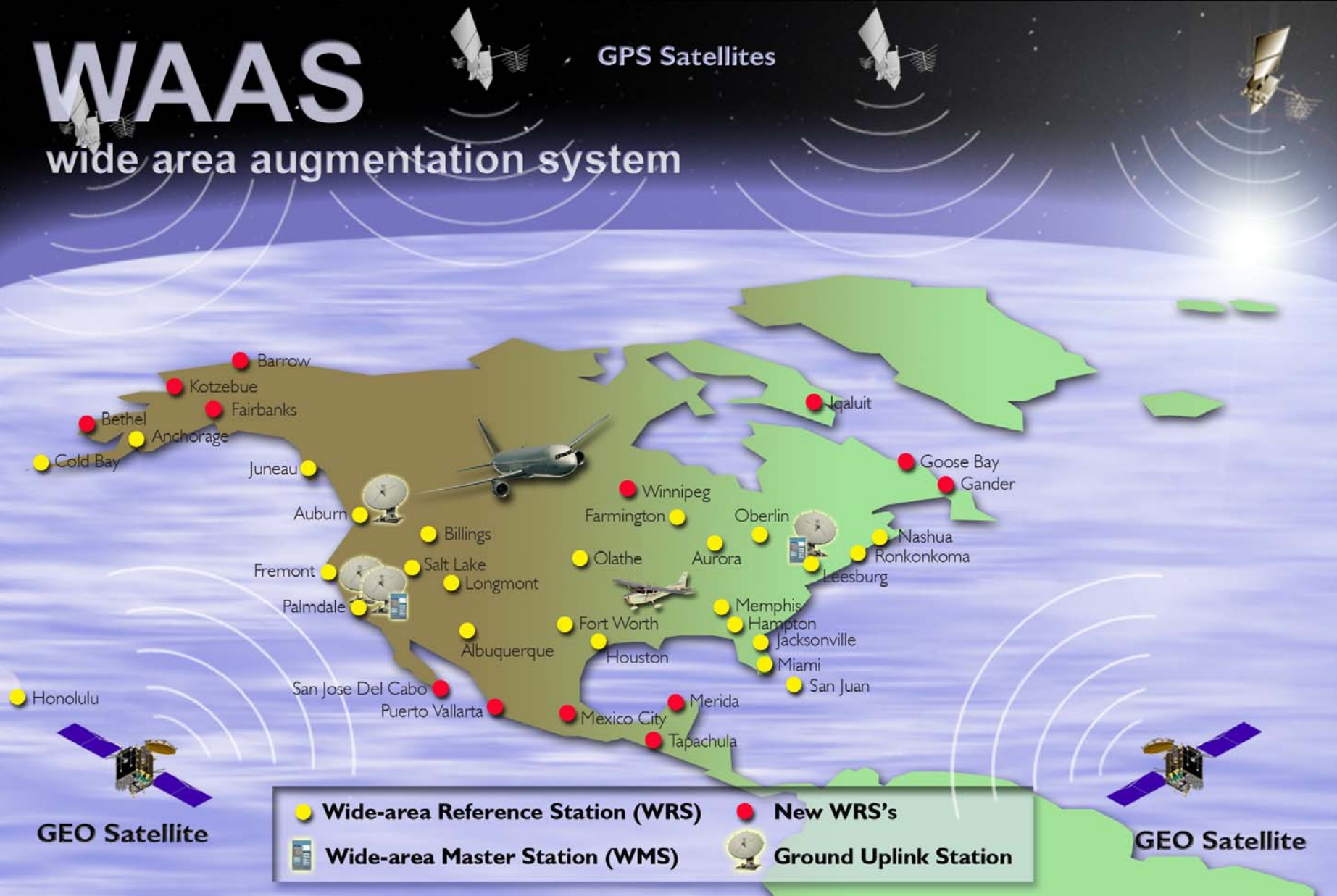
WAAS Update

JoAnn Ford

WAAS

wide area augmentation system

GPS Satellites

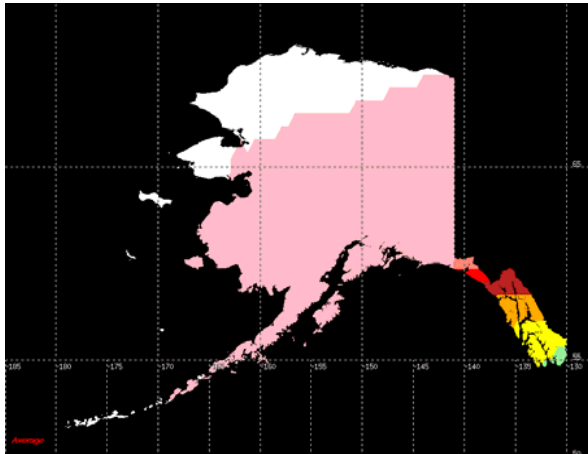
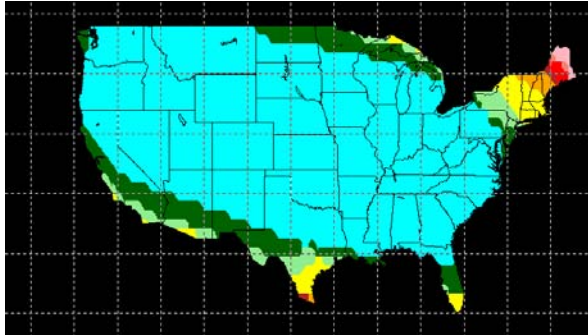


WAAS Schedule

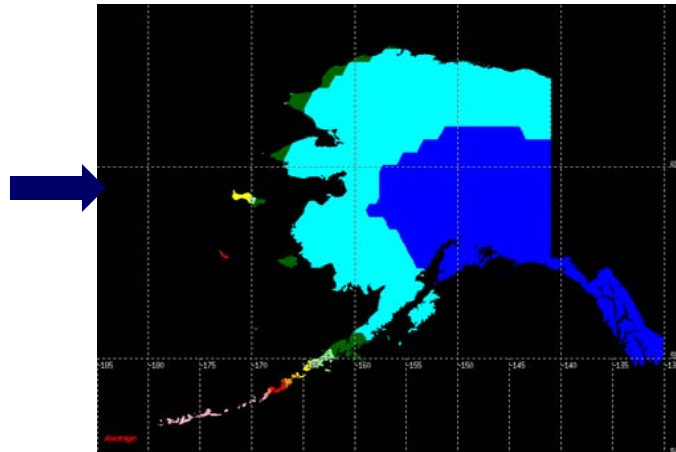
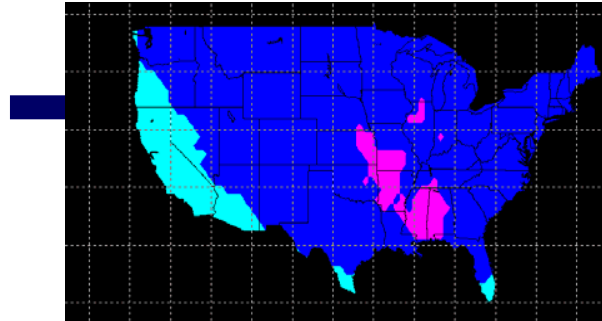
- Improvements to obtain full LPV performance
 - Increase communications capacity – September 2005
 - New WRS
 - Alaska
 - Four new sites installed February 2005
 - Operational Summer/Fall 2006
 - Canada
 - Two sites installed Summer 2005, two to be installed Summer 2006
 - Operational 2007
 - Mexico
 - Three sites installed Summer 2005, two to be installed Summer 2006
 - Operational 2007
 - Replace GEO communication links
 - Launched in September and October
 - Operational 1st/2nd Quarter FY07
 - Software integrity monitor improvements to be introduced in 2007 and 2008
 - End state performance will result in greater availability of service

Predicted WAAS Availability Gains

Commissioning - 2003



Full Capability - 2008

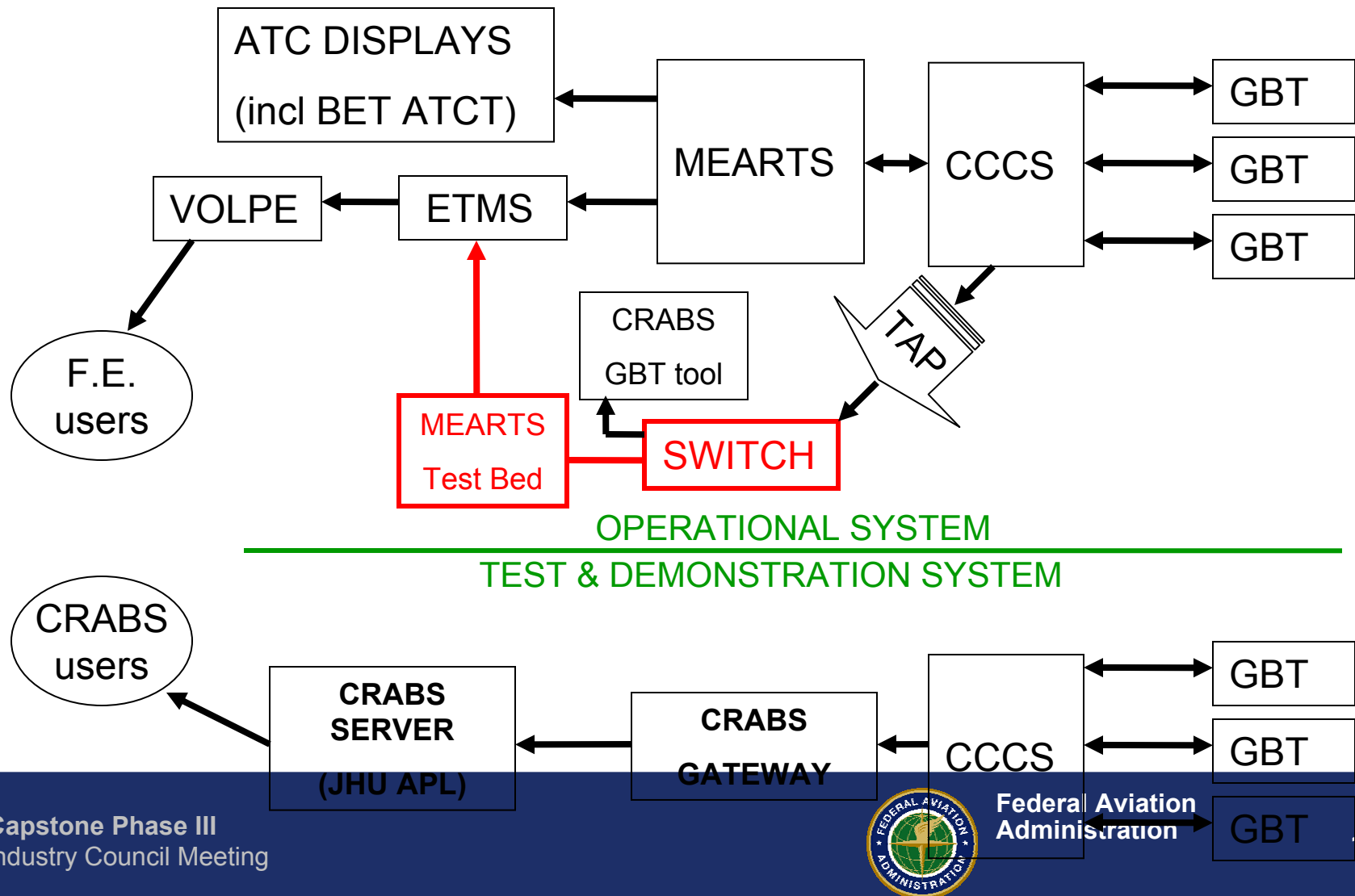


- Availability over the majority of CONUS improves from 99.5% to 99.9 – 99.95%
- Alaskan availability improves from less than 75% to 99 – 99.9%
- Significant availability gains in northeast and southern California, Texas, and Florida

FIS-B & OFMS Update

Mark Olson

ADS-B Architecture: OFMS



Capstone Services Status

				Operator Fleet Monitoring	
	ADS-B Surveillance	FIS-B	TIS-B	CRABS	VOLPE / Flight Explorer
Phase I: Y-K Delta					
Bethel	% OUT of service	X	N/A	X	% OUT of service
Aniak	% OUT of service	X	N/A	N/A	% OUT of service
St. Mary's	% OUT of service	X	N/A	N/A	% OUT of service
Dillingham	% OUT of service	X	N/A	N/A	% OUT of service
King Salmon	% OUT of service	X	N/A	N/A	% OUT of service
Unalakleet	# TBD	X	N/A	*	*
Sparrevohn	# TBD	X	N/A	*	*
Tatalina	# TBD	X	N/A	*	*
Cape Romanzof	# TBD	X	N/A	*	*
Cape Newenham	# TBD	\$ OUT of service	N/A	\$ OUT of service	\$ OUT of service
Site Summit	Spring '06	X	X	X	N/A
Phase II: Southeast					
Juneau	Spring '06	&	N/A	&	N/A
Yakutat	Summer '06	X	N/A	X	N/A
Sisters Island	Summer '06	X	N/A	X	N/A
Gustavus	Summer '06	X	N/A	X	N/A
Lena Point	Summer '06	X	N/A	X	N/A
Biorka	Summer '06	X	N/A	X	N/A
Gunnuk	Summer '06	&	N/A	&	N/A
Wrangel	Summer '06	&	N/A	&	N/A
Angoon	Summer '06	X	N/A	X	N/A
Haines	Summer '06	X	N/A	X	N/A

ADS-B Off the Glass

Pat Poe

Sue Gardner

Impact of ADS-B off the Glass (in today's environment)

- Airborne Services Impact
 - No Impact

- Ground-Based Services Impact
 - Loss of ATC Services
 - VFR Flight Following by controllers (workload permitting)
 - IFR surveillance using surveillance separation standards
 - Loss of non-ATC Services
 - Search and Rescue enhancement through flight tracking
 - Flight Monitoring of aircraft locations by operators / owners

Status

- FAA proactive approach
 - Rick Day visit to Alaska, week of April 10th
 - Safety Assessment Team visit week of April 17th
 - Safety Assessment of ADS-B targets on Controller Displays at ZAN
 - Alternate data path for Fleet Monitoring Services

Capstone Coalition Update

Tom George
Dee Hanson